REMARKS/ARGUMENTS

Claims 22-35 are active.

The Specification has been amended to correct a typographical error on page 4. Support for the correction to recite I36F is apparent from Fig. 5A which shows "F" (phenylalanine) at position 36 as being substituted by "I" isoleucine and not by "L" leucine. See table below based on Fig. 5A:

	X3	X4	X5	X6	X7	X8	X9
	34	35	36	37	38	39	40
1-40YF.17D (vaccine, non-virulent)	R	W	**F**	V	R	N	P
1-40/YF 17D (more virulent mutant)	T	W	I	L	R	H	P
1-40 DEN-2 (wild-type)	T	W	I	L	R	H	P
1-40 DEN-2 (F36) (less virulent)	T	W	**F**	L	R	H	P

Claims 22-35 find support in the disclosure as follows: Claims 22-24 (Claims 1-2), Claims 25-28 (page 2, lines 24-26, page 4, lines 13-14) and Claim 29 (page 7, lines 31-32), Claims 30-32 (page 8, lines 1-9), Claims 33-34 (page 9, lines 5-8), and Claim 35 (Claim 3, page 15, line 15). Accordingly, the Applicants do not believe that any new matter has been introduced.

The Applicants thank Examiners Salvoza and Housel for the courteous and helpful interview of January 19, 2006. The breadth of Claim 1 was reviewed and it was suggested that the Applicants consider directly the claims to particular segments of the dengue virus M protein ectodomain and provide evidence that this protein was well-known in the art. It was indicated that this would help address the prior art rejections which were based on non-

dengue virus proteins that fell within the broad scope of Claim 1. It was also suggested that the Applicants revise Claim 13 to remove functional language to avoid certain enablement issues. The Applicants pointed out that the specification, pages 8-9, disclose how to make and use the claimed peptides.

Restriction/Election

The Applicants previously elected Group I, Claims 1-3 and 13, directed to peptides and peptide compositions. The Restriction has now been made FINAL. The Applicants respectfully request rejoinder and allowance of claims directed to non-elected subject matter which depend from or otherwise include all the limitations of an allowable elected claim.

Objection—Claims

Claim 13 was objected to as being in improper form. This objection is now moot.

Rejection—35 U.S.C. § 112, second paragraph

Claims 2 and 3 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is moot in view of the cancellation of the rejected claims.

Rejection—35 U.S.C. § 112, first paragraph

Claims 13 was rejected under 35 U.S.C. §112, first paragraph, as lacking adequate enablement. This rejection is moot in view of the cancellation of the Claim 13. It would not apply to the present claims which do not refer to inducing protection against viral infection. As discussed in the recent interview, the Applicants note that the peptides of the present invention, which are based on a modified dengue virus M ectodomain, are discloses as lacking pro-apoptotic activity (page 8, lines 3-5) and as having antibody binding activity

(page 8, lines 6-9). As also disclosed on page 8, such peptides may be conjugated to immunogenic carriers to induce such antibodies. Such antibodies are discloses as being useful for analysis of dengue virus or as screening reagents (page 8, lines 20-24), and would be recognized by one of skill in the art as also being useful for detecting modified viruses as are antibodies to modified viruses containing these modified peptide sequences (page 9, lines 30-31).

The attached scientific review articles show that the dengue virus M protein ectodomain and its sequences were well-known in the art as of the filing date—see, for example, page 662 of Chambers et al., ("Flavivirus Genome Organization, Expression, and Replication"), or page 938, second col., of Rice, ("Flaviviridae: The Viruses and Their Replication").

Rejection—35 U.S.C. § 102

Claims 1 and 3 were rejected under 35 U.S.C. §102(b) as being anticipated by Milbrandt et al., search result (dated 6/23/1998). This rejection is moot in view of the cancellation of Claims 1 and 3. The cited reference is directed to a rat ninjurin peptide and not to dengue virus sequences. Therefore, this rejection would not apply to the present claims which are directed to modified peptides based on the well-known dengue virus M ectodomain.

Rejection—35 U.S.C. § 102

Claims 1 and 3 were rejected under 35 U.S.C. §102(b) as being anticipated by Skubitz et al., search result (first entry 12/10/02). This rejection is moot in view of the cancellation of Claims 1 and 3. It would not apply to the new claims since it directed to a human CD66, non-dengue virus sequence and does not anticipate the new claims.

Rejection—35 U.S.C. § 102

Claims 1 and 13 were rejected under 35 U.S.C. §102(b) as being anticipated by Fraser et al., U.S. Patent No. 6,180,604. This rejection is moot in view of the cancellation of Claims 1 and 13. It would not apply to the new claims since it directed to a non-dengue virus sequence and does not anticipate the new claims.

Rejection--Double Patenting

Claim 1 was provisionally rejected under the judicially-created doctrine of obviousness type double patent over Claim 1 of copending Application 10/608,147. The Applicants submit that this rejection is now moot in view of the cancellation of Claim 1. In the event that this rejection is reimposed, the Applicants respectfully request that their response be held in abeyance until the identification of otherwise allowable subject matter in the present application. Upon an indication of allowability for the pending claims, the Applicants understand that the provisional double patenting rejection will be withdrawn, provided the claims in the copending application have not been allowed, MPEP 804(I)(B).

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notice to that effect is earnestly solicited.

Respectfully submitted,

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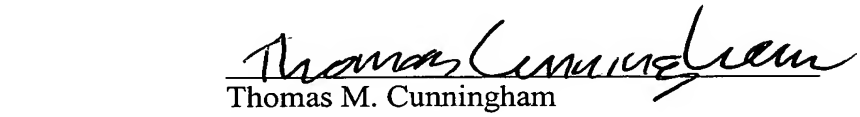

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